

From owner-qrp-1@netcom.com Mon Feb 6 17:43:24 1995
From: RobCap@aol.com
Date: Mon, 6 Feb 1995 09:36:35 -0500
Message-Id: <950206093628_14231762@aol.com>
Subject: "T" is for "Toroid"

Well, I've spent the past week working on my Sierra, and that means winding toroids. Five band modules with eight toroids each, and seven toroids on the main board, for a total of 47 toroids. My three year old girl was working with me on her alphabet, and when she asked: "Daddy, what is 'T' for?" I replied: "'T' is for 'Toroids.'"

Many of the toroids have 30+ turns, at least six toroids with both primary turns and secondary turns. But the one I'll remember is the VFO coil with *58* turns.

Thanks Wayne for giving me this experience. Now my life is complete.

73,

Rob, WA3ULH

From owner-qrp-1@netcom.com Mon Feb 6 13:21:59 1995
Date: Mon, 6 Feb 1995 09:24:25 +0500
From: teda@meaddata.com (Ted Albert)
Message-Id: <9502061424.AA08798@rain.meaddata.com>
Subject: Re: 79'er test

> Anybody hear any activity in the NEQRP 79'er test last night? I listened on
> 3579+/- KHz from 9-10 pm without luck. From here is South Jersey. I did hear
> some faint (229) cw at about 3576 but couldn't copy a call sign. There was
> also a commercial station "SXA36" or something like that at about 3650. Is
> that from Greece? he was usually 579, peaking 599.
>
> Didn't have my xtal controlled xmtr working so I didn't call CQ or anything.
> Had I heard a "real" participant I would have answered them with my Argo. Next
> week I should have my xtal-controlled rig working. Hope there's someone around
> to work...
>
> 72/73,
>
> Joe E. N2CX
>

I was listening and did not hear a thing in Ohio. I will try to cobble something together this weekend and get the color burst crystal I have in the parts bin active for this event.

Over the weekend I did have QRP fun on 3560 running the Argonaut 2. Friday night was a great night, even though we were in the midst of that big snow storm. I called CQ on 3560 at 5 watts three times and snagged K3JRR in MD for a 569. He said the CQ QRP call made him stop by for a visit. Then I dropped to 1 watt and called twice before WA9SWS in IL called, with a 579 report. He too said the CQ QRP call caught his attention. I haven't computed the distances yet, but it was fun. Plan to do some more work at the 1 watt level this month. Maybe it is time to try that SWL80 kit from NN1G?

73 de Ted, KF8EE

From owner-qrp-l@netcom.com Tue Feb 7 01:31:38 1995
Date: Mon, 6 Feb 1995 20:53:00 -0500 (EST)
From: Async User <truck@epix.net>
Subject: Re: Available files
Message-Id: <Pine.SUN.3.91.950206205117.5169A-100000@grape.epix.net>

mike could you please send me a copy of these notes ed...ka3yaa...73

On Sun, 5 Feb 1995, Mike Czuhajewski wrote:

> Here are some of the files I have on the disk at my host which I can
> e-mail on request if anyone wants to see them; most have been posted to
> the qrp list in the past.
>
> INTRORFD (also stored under the old file name of HAYWARD)--note about
> the "new" book by W7ZOI titled Introduction to RF Design, a reprint by
> ARRL
>
> FBT0--notes on the computerized bibliography of ham radio articles; the
> program goes by the name of From Beverage To Oscar, is currently being
> updated, and should be done in a month or three.
>
> GQRP--reprint of my article in the QRP Quarterly a while back, an
> introduction to the GQRP club in the UK for those not familiar with it
> (these are the folks who publish SPRAT)
>
> KEYCAD--notes on the computer drawing program which I use to make
> schematics and some drawings for the Idea Exchange in the QRP Quarterly
> (also used by KI6DS for QRPP)
>
> COPYFAQ--explains some things about copyright as it relates to use of
> things on e-mail/Internet; good reading for someone who wants to use
> something from cyberspace in a QRP publication
>
> TAC1--first impressions on viewing the prototype of the latest QRP rig
> from Dick, KA3ZOW of S&S Engineering--this time around he uses a rotary
> knob and digital display!

>
> If anyone wants to see one of these, send me e-mail requesting it by
> name. 73 and Queue Our Pea DE WA8MCQ
> --
> Mike Czuhajewski, user of the UniBoard System @ wb3ffv.ampr.org
> E-Mail: Mike.Czuhajewski@hambbs.wb3ffv.ampr.org
> The WB3FFV Amateur Radio BBS - Located in Baltimore, Maryland USA
> Supporting the Amateur Radio Hobby, and TCP/IP InterNetworking
>

From owner-qrp-1@netcom.com Mon Feb 6 15:30:29 1995
From: "Tim Stabler" <TSTABLER@iunhaw1.iun.indiana.edu>
Date: Mon, 6 Feb 1995 10:34:00 CST
Subject: Hambrew
Message-Id: <63602F509D@iunhaw1.iun.indiana.edu>

Saw a listing over the weekend regarding the phone number for Hambrew. Yes, the 800 number has been disconnected due to strange calls received.

The number is (303) 989-5642. You will probably get the answering machine. I have called about 5 PM Colorado time and gotten George, the publisher.

As before, subscriptions are \$10/year for the US, \$15/year for Canada and Mexico and \$21/year international. If there are any left, you can start with the current issue for \$11 for the first year. The extra \$1 is for first class mailing. Since all issues sent out of the US are sent first class, there would be no increase for these people.

I mentioned "if there are any..." as George told me he did not publish a huge number of extra copies for this first issue under the new publishing format.

From owner-qrp-1@netcom.com Mon Feb 6 14:27:43 1995
Message-Id: <m0rbVp4-0004bCC@wb6hqk.ampr.org>
Date: Mon, 6 Feb 95 07:57 WET
From: bart@wb6hqk.ampr.org (Bart Rowlett)
Subject: Re: Heliograph

In article <Pine.3.89.9502051159.A21086-0100000@teal.csn.org> you write:
>
> This may be a bit off subject but I am looking for Heliograph
> Instruments. You know, sun telegraph, Geronomo, South West etc. Any
> leads would be appreciated. I understand they were used by Canadian
> Armed forces into the mid 20th century.

I once saw one for sale in a small military antique store in Santa Monica CA but it was missing quite a few parts (the relay mirror assy) so I didn't buy it. I have made several over the years using simple home shop construction techniques and have had all sorts of fun. There are a series of papers, ledgers and reports located at the University of Arizona at Tucson detailing the heliograph operations in the Southwest during the Indian wars. It's quite interesting reading if you're ever in Tucson but be advised you will likely have to make an appointment; it's historical stuff and you'll be supervised while examining the material. The southwestern network did not use commercial instruments but very simple devices made from materials readily found at post stores. Since they were definatly fixed point to point, they used semi-permanent aiming posts. The mirrors were simple 'looking glass' mirrors in a simple gimbal arrangement and the keying was performed by interrupting the beam with a paddle. Seems crude but it's quite practical, stable and makes up for crude mechanisms. Typically one person would keep the mirror aimed, one would key and one would handle the clipboard. For receiving, the guy with the paddle would receive. Typical paths were only about about 10 - 20 miles but sometimes intermediate stations would be skipped for 30+ miles.

During the late 19th century campaigns in Africa the british set up networks consistent with the doctrine developed for Europe (<10mi hops) and quickly found out half or more of the relays were unnecessary; some hops were nearly 100 miles in the clear air.

>My purpose is to try to recreate some of the old distance records set.

Do it!! I wanted to for years but never could get enough interested in such a project!

I have developed some sighting methods which can be used to point to the distant target even if you can't see it through the haze. That in itself is an interesting problem and can make the outing worth while, especially when it works!

I would suggest building up a couple of sets using a 4 to 10 inch mirror and get the feel of what it's all about. If you're lucky you can get by without the relay mirrors but it obviously depends on your path, the season, and the time of day. I also suggest building up a set of blinkers for nighttime and short range daytime operations since it's just as much fun and is a good way to learn to copy code visually; something that defiantly takes a bit of getting used to.

Where are you located? How about a rendesvouz in Arizona/New Mexico sometime? I'll be in the Guadalupe mountains of New Mexico caving this Septmber or October.

The above historical facts were very carefully researched years ago but are

now just 20 year old recollections; the claims could be a bit scrambled....

bart wb6hqq

bart@wb6hqq.ampr.org

From owner-qrp-l@netcom.com Mon Feb 6 17:52:33 1995
Date: Mon, 6 Feb 1995 13:27:15 -0800 (PST)
From: Electronic Design Magazine <dmalinak@CLASS.ORG>
Subject: Help with Explorer!?!
Message-Id: <Pine.SUN.3.91.950206131533.16904A-1000000@class.class.org>

Hello all: This is my first post to the list after lurking for a few months, so here goes. I'm a relatively new QRPer and even newer kit-builder, so I'm here as a "newbie" asking for some help.

I've built an OHR Explorer for 30 meters. On the receive side, it seems to be fine. A little noisier than I expected, but reasonably sensitive. However, all is not well on the transmit side.

I've been through the alignment procedure, oh, half-a-dozen times. Everything SEEMS OK. If I transmit on, say, 10.125 MHz, I get an output indication on my OHR wattmeter of somewhere between 2 and 2.5 W. So far, so good. I listen on 10.125 with my HW-9 and yes, I hear the Explorer. But whereas my frequency counter (with random-wire antenna) shows me a 10.125-MHz readout on the HW-9 at 2-W output, the same counter, with the Explorer as the signal source, shows me 9.375 MHz as the transmitted frequency (with its tuning dial set at 10.125 MHz)! Obviously, something is not right. I can call CQ all night with the Explorer and not work a soul. Same antenna, call CQ with the HW-9 at 2 W, and work people in short order. Heard someone calling CQ, answered with the Explorer several times...not heard. Answered with the HW-9...came back first time. So why am I hearing the Explorer with the Heathkit at 10.125 MHz and getting a frequency readout on the counter of 9.375 MHz?

I spoke to Dick at OHR this morning, and his suggestion was that I've adjusted the Explorer on the wrong side of zero beat. Well, that sounds OK if the offset was 750 Hz. But it's 750 KHz! I tried, a couple of times, to make him understand the difference, but he persisted in suggesting that the BFO was out of kilter. Well, I'll try that this evening before I'm unable to hear the CW fox (as usual). But I'm not expecting it to work. Or should I? Any suggestions from the vastly more experienced crowd of builders/QRPer's receiving this 750-KHz-offset cry

for help?

72 es 73,
David M.
N2SMH in Glen Rock, NJ

From owner-qrp-1@netcom.com Tue Feb 7 01:59:07 1995
Date: Mon, 6 Feb 1995 21:08:47 -0800 (PST)
From: Stephen Lee <slee@u.washington.edu>
Subject: Re: Help with Explorer!?!
Message-Id: <Pine.A32.3.91c.950206194105.91300A-100000@homer04.u.washington.edu>

Hello Dave,

Stephen Lee here, AB7HI

I believe Dick at OHR has given you the correct advice regarding your OHR Explorer 30 meter rig. I just put mine together 1-1/2 weeks ago. The assembly went well and the receiver section worked at first power up. Mine was on the wrong side of zero beat on initial power up. A simple adjustment on a potentiometer put it right.

I tried for two evenings to raise somebody with my new Explorer 30. Guess what Dave...the band is D-E-A-D in the evening except for some diehard hams doing digital work. Tried it on Saturday, January 28, and the band was lively. JH7JVJ. Seo, in Japan was coming in strong. I sent out my CQ and I swear he came back to me. Then there was a pile up and the big boys took over. I managed a fine QSO with Morley, K7UM, Salt Lake City, Utah, on a higher frequency. His signal report to me was a 569. This last Saturday, the 30 meter band was terrible at this QTH (Tacoma, Washington). Sunday was no different...it was the pits!

My antenna is a Butternut HF9VX vertical which is mounted on the ground. The max output power of my Explorer 30 is 4 watts with an SWR of 50 milliamps. I trimmed the power down to 3 watts, measured with the OHR milliamp meter.

Tonight I measured the output frequency at several settings following a ten minute warm up and here are the results:

dial set to 0: measured frequency: 10,100,008 Hz

dial set to 25: measured frequency: 10,125,553 Hz

=09dial set to 50: measured frequency: 10,149,896 Hz

Output frequency was measured using a Global Max 500 frequency counter and a times 10 oscilloscope probe. A s=FB standard banana plug test lead was=20 connected between the rig's output and the dummy load. An 8 inch piece of wire was wrapped 5 times around the test lead and one end connected to the oscilloscope probe. The probe ground was connected to the Explorer's ground terminal. =20

I'm very satisfied with the performance of my OHR Explorer 30, Dave. There is nothing in its construction that is overly difficult yet there are=20 enough parts involved to challenge the novice builder. I was able to=20 complete the construction in 3 evenings and aligned it on the 4th morning.

There's at least two more folks in this group that own Explorer 30's beside= s the two of us Dave. Between the four of us, we should be able to sort out any problem you might be having. But first, please verify that your rig is set to the correct side of zero beat. Let me know how it goes, OK?

73's Dave!
Stephen Lee
AB7HI

From owner-qrp-l@netcom.com Mon Feb 6 17:53:28 1995
From: CLATON.CADMUS@hamlink.hamlink.mn.org (CLATON CADMUS)
Date: Mon, 06 Feb 1995 11:50:41
Message-Id: <792072331.AA00460@hamlink.hamlink.mn.org>
Subject: K1BQT TRAVEL RADIO

Hello all, after selling my HW-8 some years back I've found that I've missed qrp. I would like to scratch build a good xceiver for 80/40 and maybe 20 too. I was reading the QRP column in March '89 73. There was a very nice HB rig called a Travel Radio designed by K1BQT. Anyone happen to know where this design was published? Also, have any recommendations for designs and where to find the articles?

Any help would be appreciated, thanks & 73 KA0GKC@hamlink.mn.org

* SLMR 2.1a * I've Soldered! But I didn't Inhale!

---NoSnail 1.12

From owner-qrp-l@netcom.com Mon Feb 6 12:02:47 1995
Date: Mon, 06 Feb 1995 08:21:44 -0600 (CST)
From: Jeff Gold <JMG@tntech.edu>

Subject: MFJ 20m travel-CW

Message-Id: <01HMQ0FXSH4ICRIGPS@tntech.edu>

All,

well I have already written a more complete review of the MFJ 20M ssb radio. I am still impressed with what you get for the money. It doesn't drift like the other MFJ QRP rigs, and it gets out great with the built in speech processing. and the audio output is sufficient on this rig. It is also small enough so that with a miniature dipole, small battery and small key.. doesn't take up much room. Well I recently got the CW adaptor.

It only took a couple of minutes to install, has a nice sidetone and seems to work very well. The only draw back was that there was no audio filter on the CW and the bandwidth was too wide if many people were on the air. Was going to have a friend put in a SCAF.. but he never got around to it. Finally took the rig back. Yesterday morning was feeling like a small project. I found a headphone jack and installed it in the rear panel of the rig (ok, I almost blew the rig up by having an extra ground on the jack.. but it is one tough rig evidently).

Once I had the headphone jack (which I have been wanting to put in anyway), I hooked my Oak Hills SCAF into it and now I am very satisfied with the rig. Sure would like to have a built in filter, but no complaints.

Played with it with the CW contest(s?) and it worked great. Now with the SSB and CW it is really a travel rig for me.

73,72

Jeff, AC4HF

From owner-qrp-1@netcom.com Mon Feb 6 23:36:22 1995

Date: Mon, 6 Feb 95 12:10:59 -0600

From: adams@chuck.dallas.sgi.com (chuck adams)

Message-Id: <9502061810.AA03601@chuck.dallas.sgi.com>

Subject: Misc Stuff

1. John Moriarity, your 8044 stuff was returned to me 'cuz USPS forwarding order expired. Give me your new address please.
2. OK: Dayton construction contest. Haven't heard back from

anyone that was going to look at this, so let's bring it up one more time.

Looking at "Solid State Design" by Hayward & DeMaw by ARRL.
How about page 26 and page 27 for the "Universal QRP Transmitter"?

- a. It fairly simple.
- b. Crystal controlled.
- c. Sample board on page 27, which is probably available from FAR.
- d. Should get all the parts under \$10. (Am I dreaming here?).
- e. It does take toroid winding, so add some difficulty in getting it together in under 1 minute. :-) Get rid of the toroid haters. :-)
- f. Maybe do it for 3.579454 crystals, so one would be ready for the NE Feb sprint.

One additional point of thought. How about a pre-built (before Dayton) contest for bringing one to Dayton with categories for smallest volume, best looking packaging, worst looking but still operational, most solder used (:-)), Dead-On-Arrival, and Fried Silicon Award (fried on power up).....

3. Novices/Techs who entered the NR. 14 days to get your entries to me and the ARRL (my restriction, not the ARRL's).
4. I will bring to Dayton, one TenTec Argosy (525) Analog dial xcvr with AC Supply. Clean and was previously owned by W5HKA (Luke) and I've had it on only for the QRP Afield last Sept at 0.95W on 20M. It is for sale and I don't want to ship it anywhere. So I'm asking \$500 complete and I don't think that is too unreasonable, but let me know if it is. I have the 525D and a Corsair 1 that I haven't taken outta the box since I bought it early last year. :-) With all the other fun stuff, I feel that this rig deserves to be put on the air by someone who will give it a good home.

dit dit

Chuck Adams K5FO CP-60 adams@sgi.com

From owner-qrp-1@netcom.com Mon Feb 6 16:24:52 1995
Date: Mon, 6 Feb 1995 16:07:00 +0000
From: william.redfearn.cmwdr01@nt.com
Message-Id: <"26668 Mon Feb 6 10:11:55 1995"@nt.com>
Subject: QRP+ RIT/XCVE Hint

I've been following the recent discussions about the QRP+ concerning

inadvertently leaving the RIT on and trying to change bands.
Well, I've done that several times myself and it is aggravating.

The first best fix would be to install a red LED near the RIT switch to turn on whenever the switch is in RIT or SPLIT but according to the schematic, the switching logic is a little obscure and I don't want to add extra circuitry if I can help it.

In the meantime, I have attached a small bright orange dot to the top of the lever for the RIT/SPLIT switch. With the radio tilted on the desk, the orange dot is only really noticeable if the switch is in the RIT or SPLIT positions. This not quite as good as a LED but it does make it easier to notice the position of the switch.

=====
Dave Redfearn, SR PC LAN Analyst Northern Telecom RTP, NC.
ph.(919) 992-3925 email: cmwdr01@nt.com qrl? de N4ELM/qrp

All opinions are my own and do not necessarily reflect the views of my employer, co-workers or any other person, real or imaginary.

From owner-qrp-l@netcom.com Mon Feb 6 11:41:33 1995
Message-Id: <9502061522.AA02239@us4rnc.pko.dec.com>
Date: Mon, 6 Feb 95 10:22:00 EST
From: "N100Q Tom R. @ MR01 06-Feb-1995 1006" <randolph@est.enet.dec.com>
Subject: re: Receiver for General

> I did for a while, too... but what a challenge... noisy device... would have
> done much, much better with a simple direct conversion RX (except for the nice
> digital readout). It is incapable of anywhere near single signal reception --

> : John Seboldt rohrwerk@holonet.net / I am Bach of Borg...
> : Amateur radio K0JD... / your style will be

Yah, it ain't much, but it's better than nothing. My entire HF station consists of this rx and the 40m tx I built.

One of my next projects will be either: a DC rx to match my tx, a mod to the AGC of the DX440 to make it easier to use under crowded band condx, or the add-on synchronous detector. I have to get the schematic of the radio from RatShack...

-Tom R. N100Q randolph@est.enet.dec.com

From owner-qrp-l@netcom.com Mon Feb 6 14:01:04 1995
Message-Id: <9502061701.AA23507@garnet.inel.gov>
Date: Mon, 06 Feb 1995 10:02:58 -0700

From: LVE1@inel.gov (Larry East)
Subject: TenTec 509 Warm-up Drift

Have any of you 509 owners noticed excessive warm-up drift? Mine drifts about 1.5 kHz during the first 45 minutes, and another 0.5-0.75 kHz over the next hour or so (measured on 40m). Wondering if this is a generic problem, or particular to my unit. If generic, any "sure cures"?

Thanks for any info --

"Any opinions expressed herein are my own and probably do
not agree with those of my employer, the U.S. Government
or my spouse"

--... ..--

Larry V. East (W1HUE)

Idaho Falls, ID

e-mail: LVE1@inel.gov

Packet: W1HUE@WT7B.ID.USA.NOAM

work: (208) 533-4005 home: (208) 529-2162

From owner-qrp-l@netcom.com Mon Feb 6 22:57:11 1995
Date: Mon, 6 Feb 95 18:32:08 PST
From: genewill@efn.org (Gene Williamson)
Message-Id: <9502070232.AA15541@efn.efn.org>
Subject: Tiny paddles--where?

Sometime back, qrp-l hosted a discussion of "What does QRP *really* mean?" I tend to side with those who define QRP as "small, easily portable, and non-intrusive," because sometimes you just *gotta* run 100w out. (Example: I recently had occasion to control a cw pileup by throttling back the power. That was ok down to 25w or so; once I got to 20w and below, people *disappeared.*) On that trip to XF3 last November, I had so much fun that I want to make radio part of all my future vacations--only, from now on, in one *small* carry-on bag. Therefore, my question:

Where can I get a set of GOOD, teeny-tiny iambic paddles? My favorite Benchers are quite awkward and large to pack. G4ZPY makes a *gorgeous,* world-class set of paddles, and I'd love to have one, but US\$170 is a bit steep for me. An Austrian company called "SIRtex" has made an "SSM" model key, but I can't find anything on it. Any suggestions?

73 Gene K7DBV

Gene A. Williamson / Amateur Radio K7DBV | Roses are red
In A Word / 2160 Fairway Lp, Eugene OR 97401 | Violets are blue

Voice (503) 683-4164 / Fax (503) 344-3413 | I'm schizophrenic
Internet: genewill@efn.efn.org | And so am I!

~~

* VbReader 2.02 #NR * . . . Exacerbate obfuscation!

From owner-qrp-1@netcom.com Tue Feb 7 02:55:54 1995
Message-Id: <n1420045707.44629@msmailgw1.arlut.utexas.edu>
Date: 6 Feb 1995 10:49:43 -0600
From: "rohre" <rohre@msmailgw1.arlut.utexas.edu>
Subject: Visit with MXM Industries, QRP kits

Small world this!

Sunday Feb. 5 I was at the Georgetown (TX) hamfest and was visiting with Bruce Williams of MXM Industries.

We lamented together the passing of several QRP kit making enterprises lately, but Bruce has a number of stock units, and some with enclosures, so is plugging away. He likely will be at the Manchaca Swapfest (Austin TX) April 1.

I have constructed one of Bruce's 40 M transceivers as part of a community school class I helped him put on, here in Austin. Each Saturday for a month we met from 9 to noon, and he first gave the theory of the transceiver and then assisted as the class each constructed their kit. Each one was given a smoke test and tuneup and we got to view the very clean wave form on a scope. (Bruce uses a modified IF can inductor to get this clean oscillator waveform). In such a short time, with some class members needing my assistance in learning how to solder, insert and trim components, etc., most got their boards done, but unless they worked outside of class, did not get the packaging into a cabinet done in class. You have to understand, most of the class had never built anything, unless it was a crystal set from a plug together Radio Shack "kit". However, even the first time solderers agreed they had learned much and had a sense of accomplishment. I think we should have had another couple weeks if the class has a wide range of skill, or lack of skills.

Some noticed some interaction if they built the model that has the transmitter on the same board with the receiver; and cured this by shielding.

Because Bruce also has that model as a separate transmitter and receiver board, I think that would be the way to go giving the most flexibility in packaging. I think some more instruction on layout rules in the instructions might help newcomers. But the kits are not just "a bag of parts"

With so many (15) kits going all at once, a few swapped values in parts

caused us to take about a week to get everyone the complete set of parts. We were doing this each weekend in Austin, and Bruce lives east in Smithville, perhaps an hour drive from class, so the logistical supply line inevitably got stretched a bit! You learn a lot putting on a class like this for the first time, and we would bring more spare parts next time!

As stated, you do have to normally furnish your own box, and jacks and switches. For the first time constructor, this presents the need for an elmer to guide one to not make power and other jacks the same, leading to accidental and problem hookups.

You can buy an nice knob and gear reduction cap from Bruce, and it is one of the smaller ones for the range, and is highly recommended.

Bruce had his kits reviewed in 73 magazine, although the VFO model may not have been as yet. The kit I built is rockbound transmit, with the usual receive arrangement. There is a VFO model.

The oscillator and receiver sections utilize the Toko type 10.7 IF cans. With the cap cut loose on bottom, you can go up to 14 Mhz; or with extra parallel caps you get 7 Mhz, etc. That cuts down on the toroid winding chores; which if memory serves me right left only two, the driver transformer and the output tank.

I was just a club officer facilitating a group who wanted to get exposed to QRP from the local general interest ham club, and do not work for Bruce or MXM. Bruce has been around the ham business awhile having worked for the founder of Swan and Atlas radio. I met Bruce through my interest in collecting the old models of Atlas transceivers. He will make his radios work if you have a problem. He demos at local swapmeets by having a helical whip pair mounted as vertical dipoles on a pvc pole in a coffee can of concrete with a coax run in to his rigs. They have plenty of speaker volume and can be heard around the swapfest room.

72,
Stuart K5KVH

From owner-qrp-l@netcom.com Mon Feb 6 12:06:00 1995
Message-Id: <sf35e1b3.030@WordPerfect.com>
Date: Mon, 06 Feb 1995 08:46:37 -0700
From: Michael Bendio <MB@WordPerfect.com>
Subject: walking stick antenna? -Reply

The article was in Dec. '94 QST.

>>> Robert Penneys <penneys@chopin.udel.edu> 02/03/95 05:57am >>>

Got info on walking stick antenna for 20 and 40? Tnx Bob

Bob Penneys, WN3K Frankford Radio Club N.E.R.D.S.
Internet: penneys@brahms.udel.edu Work: Ham Radio Outlet,
Delaware

From owner-qrp-1@netcom.com Mon Feb 6 14:57:16 1995
Message-Id: <ab5c0c76010210044a98@[159.28.1.101]>
Date: Mon, 6 Feb 1995 13:41:39 -0400
From: georges@earlham.edu (George Silver)
Subject: [Asking Who]

who qrp-1
help